PDB15

USE OF THE PATIENT ANALYSIS & TRACKING SYSTEM (PATS) IN ASSESSMENT OF RATIONAL PHARMACOTHERAPY OF DIABETICS IN A BIG HOSPITAL

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OBJECTIVE: The aim of the pilot retrospective study was to implement PATS in the process of evaluation of pharmacotherapy of hospitalized diabetics. In 3-months cycles, collected data on pharmacotherapy were compared with clinical guidelines and hospital formulary. **METHODS:** In 148 hospitalized diabetics with the most frequent diagnosis E107 (diabetes mellitus with multi-organ complications) were collected data on pharmacotherapy in 3-months cycles. Data collected from patients' charts included clinical diagnosis, all administered drugs and their dosage forms, single and daily-prescribed doses. Those data were entered via custom-made software module in the form of drug-chart into the clinical information system PATS (Patient Analysis and Tracking System). The basic data were programmatically processed to a standard PATS registry for further analysis. The data on drugs prescription were retrieved using the ATC classification. These data were compared both with the clinical guidelines used in the department and hospital formulary. **RESULTS:** According to the 3 digital ATC codes, the prescribed drugs were from 53 different groups. The most frequently prescribed drugs were drugs used in diabetes (313 drugs including insulins), the following groups are ordered according to the frequency of use: antibiotics (123), diuretics (92), antithrombotic agents (89), and agents acting on the renin-angiotensin system (73). The further analysis has shown that there is a great variability in pharmacotherapy in patients with the same diagnosis, e.g. 7 different ACE inhibitors were administered to the patients. **CONCLUSION:** PATS is a very useful and flexible tool in assessment of rational pharmacotherapy of hospitalized patients.

EAR, EYE & SKIN DISEASES/DISORDERS—Economic Outcomes

PES1

COST OF ILLNESS OF GLAUCOMA IN CANADA: ANALYSES BASED ON VISUAL FIELD MEASUREMENTS AND PHYSICIAN'S ASSESSMENT

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OBJECTIVE: A longitudinal, retrospective study was performed to investigate the cost of illness attributed to primary open angle glaucoma (POAG). **METHODS:** Patients were identified using ICD-9 code 365.11. Three-year data associated with POAG were collected from patient charts in two clinics by a reviewer using a data collection form. A second reviewer verified data entry, including visual field (VF) mean deviation (MD), physician's assessment (PA), and resource utilization (physician visits, procedures, and medications). VF was classified mild (MD < 5 dB), moderate (5 ≥ MD < 12 dB), or severe (MD ≥ 12 dB); and PA as stable, uncontrolled, or delayed stable (uncontrolled for 12 months, then stable). Resources were costed in Canadian dollars from the Ministry of Health perspective using standard lists. Costs were summed for each patient, then contrasted between groups using ANOVA with Scheffe's post-hoc test ($\alpha = 0.05$). **RESULTS:** Of 411 patient charts extracted, 235 provided useable data (mean follow-up 4 years); 35 excluded patients had ocular comorbidities, 141 had insufficient follow-up data (<3 years). Mean costs (SD) for VF groups mild (n = 80), moderate (n = 81), and severe (n = 74) were $376 ($279), $493 ($314), and $586 ($251), respectively. Analysis by PA for stable (n = 115), uncontrolled (n = 62), and delayed stable (n = 58) yielded costs of $437 ($269), $506 ($320), and $547 ($306), respectively. In the VF analysis, differences were significant ($p < 0.05$) between all groups for the first half of the follow-up period and between mild and severe for the entire follow-up period. For PA, the mean cost of the stable group was the lowest, without however significant differences. DISCUSSION and **CONCLUSIONS:** The cost of treating POAG increases with severity, especially when applying VF categories. Hence, severity in terms of VF score may give an indication of the magnitude of the expected total cost. Further examination of the relationship between VF and other clinical parameters, such as intra-ocular pressure, is warranted.

PES2

MEDICAL PREDICTIVE FACTORS OF GLAUCOMA TREATMENT COSTS IN FRANCE

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OBJECTIVES: To describe the patterns and the economics of glaucoma treatment. **METHODS:** Ophthalmologists selected at random had to include 4 consecutive patients older than 18 seen in consultation during a week, 2 with glaucoma and 2 with ocular hypertension (OH). Socio-demographics, general and eye comorbidities, glaucoma risk factors, clinical data, and medical item consumption over the previous 5 years were collected. The economic perspective was society's. Predictive medical factors of costs were identified using a stepwise regression. **RESULTS:** 84 ophthalmologists included 337 patients who were 60% female with a mean age of 62; 34.1% had OH and 35.9% were still receiving first line treatment. Glaucoma patients were older and no difference was found on confounding factors. Patients with